

16 HOSPITALS, 1 REGISTRY:
PRELIMINARY RESULTS OF THE SECOND GFAOP
REGISTRY STUDY,
ASSESSING CHANGES IN PATIENT
CHARACTERISTICS, MANAGEMENT AND OUTCOME

B. Mallon

Brenda Mallon, Rolande Kaboré, Aissata Barry, Laïla Hessissen, Fatou Binetou Akonde Diagne, Robert Lukamba, Mbolanirina Rakotomahefa Narison, Jess Élio Kosh Komba, Boubacar Togo, Angèle Pondy, Aléine Budioingo, Aïchatou Mahamadou, Benina Zein, Faten Fedhila Benayed, Francis Diedhiou, Koffi Amegbor, Catherine Patte, Lne Couitchere.

GFAOP (Groupe Franco-Africain d'Oncologie Pédiatrique)

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Background:

- In alignment with the *CureALL* initiative, the GFAOP continues to develop its centralised Hospital based childhood cancer registry database for its Pediatric Oncology units (POU) in Africa.
- A first publication in 2022 analysed the data from 13 member POU. Here we attempt to analyse the second phase.

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Objectives:

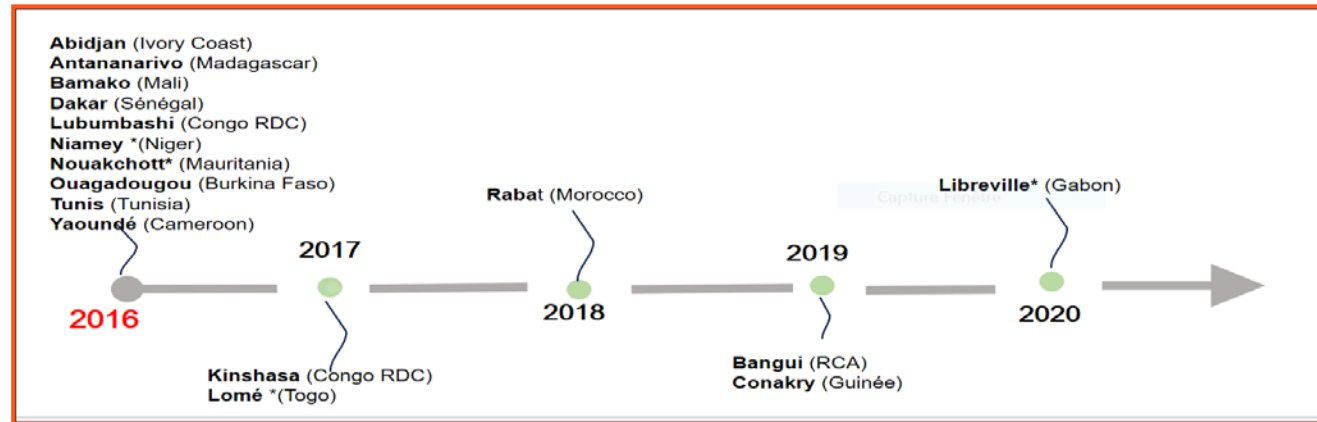
- Record the characteristics of patients registered, evaluate the capacity of units to
 - confirm the diagnose ,
 - stage and treat,
 - document outcome,
- compared these preliminary results to the first study .

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Method:

- All patients ≤ 18 years, registered in any one of the 16 participating POU between 01/01/2019 and 31/12/2021 were analysed.
- 3 POU were added since the first study of 13 POU published in 2022.



- We describe characteristics of patients with a clinical and those with a confirmed diagnosis of a cancer by radiological, histological or haematological reports.
- The date of diagnosis or date of treatment, the date of death or last news were used to calculate overall survival (OS).

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4469 children registered in 16 POU \leq 18 years with established clinical diagnosis

FALL OUT FROM CLINICAL DIAGNOSIS

- 4469 patients with a clinical diagnosis
 - 942 Diagnosis not confirmed
 - 219 abandonment (10 financial problems)
 - 258 radiological diagnosis only
 - 121 Renal tumors
 - 130 Retinoblastoma (RB)
 - 7 Burkitt Lymphoma (BL)
 - 207 reason unknown
 - 144 death
 - 41 technical problems
 - 70 palliative care
 - 3 medication not available

- 3527 patients with a confirmed diagnosis

79% patients had a cancer confirmed, by histology, cytology haematology or radiological examination

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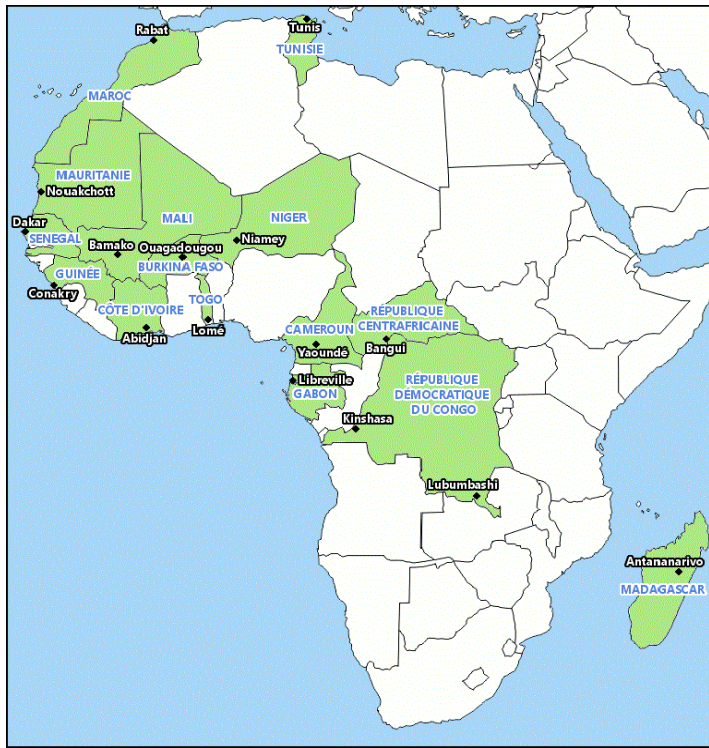
Results:

- **3527 (79%) patients with a confirmation of a cancer**
 - **2746 patients with a solid tumour**
 - **781 patients with a Leukaemia.**
- **2825 patients were staged**
- **2445 (69%) of diagnosed patients were treated and (86%) of staged patients were treated.**

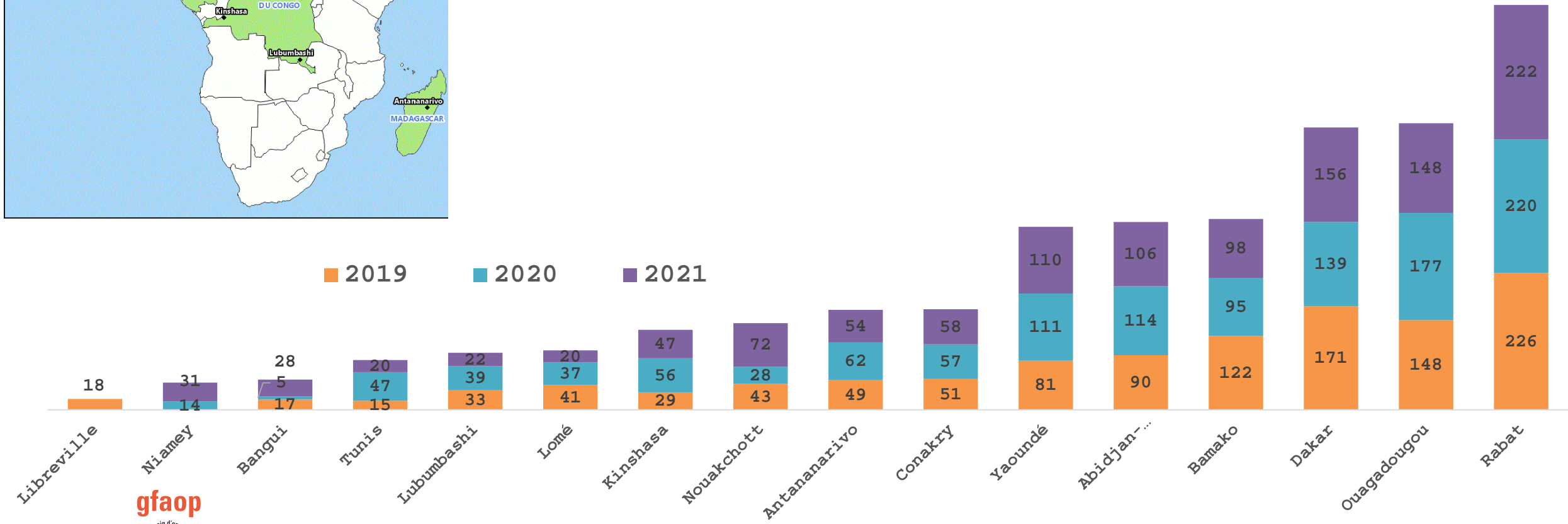
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The distribution of the number of confirmed diagnosed patients by Paediatric Oncology Unit (POU) and by year.



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Distribution of cancer type by ICCC-3

ICCC-3 Classification	N
I. Leukemias	781
I(a). ALL	531
I(b)(e). Other Leukemias	250
II. Lymphomas	902
II(a). Hodgkin's lymphoma	143
II(c). Burkitt's Lymphoma	629
II(e). Lymphocytic lymphoma, NOS	130
III. CNS	96
IV. Neuroblastoma And Other Peripheral Nervous Cell Tumors	198
V. Retinoblastomas	494
VI. Renal Tumors	404
VI(a). Wilms' Tumour	385
VI. Other renal tumors	19
VII. Hepatic Tumors	38
VIII. Malignant Bone Tumors	178
IX. Soft Tissue And Other ExtraosseousSarcomas	205
X. Germ cell, gonadic Tumours	103
Xb.Ovarian Tumour	35
Xb.Testicular Tumour	10
X.Other germinal tumor	58
XI. Other Malignant Epithelial Neoplasms And Malignant Melanomas	63
XII. Other gfaop	65
Total	3527

62% of cancer types belonged to the cancers targeted by the OMS

Burkitt lymphoma	(629, 18%)
ALL	(531, 15%)
Retinoblastoma	(494, 14%)
Nephroblastoma	(401, 11%)
Hodgkin lymphoma	(143, 4%)
CNS Glioma	(19 0.5%)

Disease extension was known for 2128
858 (35%) of children had advanced disease.
614 stage IV or metastatic disease
244 ALL patients had a high risk disease

16 Bilateral retinoblastoma disease
12 Bilateral nephroblastoma disease

OS for the 5 cancer types for which therapeutic recommendations are provided by the GFAOP

ICCC-3	12 Months		18 Months		24 Months		30 Months	
	At risk (N)	Survival (95%CI)	At risk (N)	Survival (95%CI)	At risk (N)	Survival (95%CI)	At risk (N)	Survival (95%CI)
All cancer types	815	62 (60,65)	654	58 (55, 60)	509	54 (51, 56)	333	50 (47, 53)
I.a ALL	212	56 (51, 61)	180	51 (45, 55)	147	43 (38, 48)	116	40 (34, 45)
II.a Hodgkin. L	84	90 (82, 95)	72	89 (81, 94)	65	84 (74, 90)	47	83 (73, 89)
II.c Burkitt. L	219	54 (49, 59)	169	51 (46, 56)	120	49 (44, 54)	58	47 (41, 52)
V. Retinoblastoma	148	62 (56, 68)	108	58 (51, 64)	86	56 (49, 62)	47	52 (44, 58)
VI.a Nephroblastoma	152	74 (68, 79)	125	69 (63, 75)	91	65 (59, 71)	65	63 (56, 69)

- Follow-up information for staged and treated patients was known for 2082, 947 deaths were recorded.
- Follow-up information was known for 52 of the 130 RB patients for whom diagnosis was confirmed radiologically. When added to the data the 52% OS at 30 months for RB decreases to 48%.

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Results

- Results are very similar to the initial study of 79% confirmed diagnosis, 86% of patients treated, and 83% in this study.
- A difference is noted for

Cancer types	Initial study	Present study	
Burkitt lymphoma	20%	(629, 18%)	↓
ALL	13%	(531, 15%)	↑
Nephroblastoma	18%	(401, 11%)	↓
CNS Tumors	1.7%	(96, 3%)	↑
Retinoblastoma	14%	(494, 14%)	≡
Hodgkin lymphoma	3%	(143, 4%)	≡

- 86% of children with a confirmed diagnosis were treated in the initial study compared to 69% in this study
- Follow up information is known for 2082 85% of treated patients compared to 77% 1690 in the first study.

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Conclusion:

- **Improvement in follow-up** data of treated patients of 8% was observed between the two studies.
- **OS of 83% for Hodgkin lymphoma and 63% for Nephroblastoma are on target** for the Global initiative for Childhood Cancer by the year 2030. This was not possible in the initial study.
- **Patient characteristics similar** to those in the first study, **cancers that GFAOP provides recommendations and medication topping the list.**
- **Changes in the proportions of cancer types** probably reflect the limitations of a hospital based registration where there can be a high incidence of certain cancer types.
- **No improvement in diagnostic capacity was observed**, possibly reflecting the period covered which included the COVID pandemic 2020 and 2021.

Thank you

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